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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,111	06/04/2004	Michael H. Backman	00AN171 / ALBRP144USG	9857
7590 09/07/2004			EXAMINER	
Susan M. Donahue Rockwell Automation 704-P, IP Department 1201 South 2nd Street Milwaukee, WI 53204			JONES, JUDSON	
			ART UNIT	PAPER NUMBER
			2834	
DATE MAILED: 09/07/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,111

Applicant(s)

BACKMAN ET AL.

Examiner

Judson H. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Murai et al. 5,014,625 A or Shimada et al. 5,197,391 A. In claim 1, the phrase “routing system” is interpreted to mean any means for directing an object between alternate routes. “Stage” is interpreted to mean any movable object. Murai et al. discloses a routing system as shown in figure 18 where the stage 155 can move onto one of two branch paths, each path having armature windings 157. Shimada et al. discloses a routing system as shown in figure 4 where a stage 10 can move onto one of two branch paths as described in column 5 lines 47-51, each path having armature windings as described in column 2 lines 20-26.

Claims 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Murai et al. 5,014,625 A. Claim 14 is a method claim that recites the structural features of claim 1 along with a step of detecting the position of the stage. See Murai et al. column 3 lines 63-68 for the position detection means.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al. in view of Japanese reference JP 03007003A. Shimada et al. discloses a

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routing system where a stage can move onto one of two branch paths but does not disclose a bridge moveable between first and second positions. Japanese reference '003 discloses a bridge 50 as shown in figure 6, the bridge being movable between first and second positions to connect track 53 to either track 54 or track 55. Since Japanese reference '003 and Shimada et al. are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a bridge portion to alternately connect path portions quickly and easily.

Claims 6-9, 11-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al. as modified by Japanese reference '003 in view of Laurent et al. 6,257,604 B1 and Svensson 5,845,581 A. Shimada et al. as modified by Japanese reference '003 discloses the routing system with a bridge portion but does not disclose using a linear motor to move the bridge portion. Shimada et al. only states, "... the branch track 7a or the side track 7b may be movable ..." Svensson teaches in column 10 lines 47-61 that a crank motor, driven rollers or a hydraulic cylinder can be used to move a bridge portion for a vehicle pathway. Since Svensson and Shimada et al. as modified by Japanese reference '003 are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a hydraulic cylinder or a motor to move a bridge portion of a vehicle pathway. Laurent et al. 6,257,604 teaches that an electric motor has some advantages over a hydraulic motor in column 2 lines 46-58. Since Laurent et al. and Shimada et al. as modified by Japanese reference '003 and Svensson are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a linear motor instead of a hydraulic cylinder in order to move a

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bridge portion linearly because electronic control makes it possible to run an electric motor more rapidly and more directly than a hydraulic or pneumatic component.

In regard to claim 7, see Svensson figure 9 and column 9 lines 29-60. Since Svensson and Shimada as modified by Japanese reference '003 are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a rotatable bridge portion in place of a bridge portion where both ends of the bridge move for the purpose of reducing the size of the area needed for the bridge portion. This reduction in size is important both for a wafer transport system as taught by Shimada et al. because wafer processing is done in clean rooms which are expensive to maintain and therefore must be as small as possible and also for a monorail train as taught by Svensson because monorail trains are used in densely populated areas where real estate is expensive.

In regard to claim 8, see Laurent et al. column 2 lines 46-49.

In regard to claims 9 and 12, Japanese reference '003 figures 1a, 1b, 1c, show a plurality of armature windings on both sides of section 10a of figure 1b and then armature windings on only the outer sides of the routing system portion followed by armature windings on both sides of sections 10a and 10c. See English translation of Japanese reference '003 on page 4 from the subheading Function (8 lines from the bottom of the page) to page 5 line 2.

In regard to claims 11 and 13, see Japanese reference '003 figures 2 and 4.

In regard to claim 16, see Japanese reference '003 figure 6.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al. as modified by Japanese reference '003 as applied to claim 3 and further in view of

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Hirtz 5,156,092 A. Shimada et al. as modified by Japanese reference '003 discloses the routing system with a bridge portion but does not disclose branch portions at different levels. Hirtz recognizes that branch pathways can be located on different levels in column 3 lines 4-8. Since Hirtz and Shimada et al. as modified by Japanese reference '003 are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a routing system to route a stage between a main path and a branch path on a different level.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H. Jones whose telephone number is 571-272-2025. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JHJ 8/26/2004


THANH LAM
PRIMARY EXAMINER